AMENDMENTS TO THE SPECIFICATION

Please amend the heading at age 1, line 5, as follows:

~~Technique field~~ BACKGROUND OF THE INVENTION

Field Of The Invention

Please amend the heading at page 1, line 10, as follows:

~~Technical background~~ Description Of The Related Art

Please amend the paragraph starting at page 1, line 10, as follows:

When ~~the~~ production well treating fluid is used as a drilling fluid in drilling a well, the production well treating fluid always is faced with a problem on how to ~~solve better such~~ better solve a contradiction between the "stabilization of borehole wall" and/or the protection of oil-gas reservoir and "stabilization of drilling fluid properties". Generally, a drilling fluid of an anionic system (electronegativity) is favorable for stabilizing the properties of drilling fluid itself, not for stabilizing the borehole wall and ~~the~~ protecting ~~of~~ the oil-gas reservoir. The electronegative clay mineral is easily swelled and dispersed into drilling fluid. Such swelling and dispersion are adverse to the stabilization of borehole wall. Alternatively, the drilling fluid system added with cationic compounds is favorable for stabilizing the borehole wall and the protecting of the oil-gas reservoir due to decreasing expansion and dispersion of electronegative clay mineral, but not for stabilizing the properties of drilling fluid itself.

Please amend the paragraph starting at page 1, line 22 as follows:

[[In]] For a long time, the problem of stabilizing a borehole wall, especially the problem of stabilizing a borehole wall in clay shale strata, is one of important reasons ~~to cause complicated case at~~ complicating downhole in drilling engineering. Especially since the 1980s, as exploration ~~field~~ spreads towards new area areas, the strata met in drilling [[is]] are increasingly complicated, the problem of borehole wall instability is increasingly serious. This sets higher requirements for borehole wall stability of drilling fluid.

Please amend the paragraph starting at page 1, line 28, as follows:

Water-base drilling fluids used in current drilling process are mostly an electronegative dispersed system formed by dispersing clay particles in water, wherein the dispersion of clay particles depends on excess of negative charges presented in the crystal structure of clay particle itself. Now, during treating with the drilling fluid, treating agents used are almost all the anionic types that have very strong anion group itself. For example, in the case of dispersant and colloid-stabilizing agent and the like, the main action mechanism is namely in increasing negative charges of clay particles, intensifying hydration effect caused by negative charges and increasing the hydrated film thickness on clay particle surface to achieve the object of stabilizing colloid. Such kind of electronegative water-base drilling fluid system is undoubtedly disadvantageous for clay mineral in borehole wall and strata. This is because whatever factor is able to disperse clay particles of drilling fluid, it leads certainly to hydration, swelling and dispersion of clay mineral in the borehole wall and strata, results in losing the stability of the borehole wall and ~~appearing complicated~~ complicates cases such as slump of borehole wall and seizure of drilling tool and the

like.

Please amend the paragraph starting at page 2, line 11, as follows:

Therefore, in order to inhibit the dispersion of clay and stabilize the borehole wall, a main measure that has to be taken generally is to add cationic substance, for example, inorganic salts of high valence metals such as iron chloride, aluminum chloride, ferric sulfate, ~~hydroxyaluminium~~ hydroxyaluminum and the like; cationic organic substances such as cationic polyacrylamides, black organo-electropositive glues and inorgano-electropositive glues and the like into drilling fluids. They are able to neutralize negative charges of the clay surface, decrease ξ (zeta) potential of clay particles, decrease the hydrated film thickness, thus weaken the hydration effect of clay, being favorable for stabilizing borehole wall (see also U. S. Patent No. 4,765,415, 4,959,164 and 5,196,401 and the like). However, these measures for stabilizing the borehole wall are disadvantageous to stabilizing the colloid of drilling fluid and cause increasing filtration loss of drilling fluid [[in]] to a great extent. In order to increase colloid stabilization of drilling fluid, a great mount of an anionic stabilizer (fluid loss additive and dispersant) has to be added, but the addition of these treating agents will increase the negative charge in quantity. So drilling fluid stability and strata stability are always in contradiction to each other.

Please amend the paragraph starting at page 3, line 2, as follows:

Before and after the 1980s, some treating agents having positive charges appear one after the other. Especially in recent years, after a mixed layered metal hydroxide compound having positive charges (i.e. an inorgano-electropositive ~~glue~~ gel or abbreviated as MMLHC) and black

organo-electropositive ~~glue~~ gel are used in drilling fluid system, relatively great progresses have been made. Because such kind of electropositive ~~glue~~ gel granules and clay particles form a stable complex, by forming the complex by polarizing water molecule through particle electric field no destruction of colloid occurs in this drilling fluid system.

Before the paragraph starting at page 5, line 3, please insert the following heading:

-- SUMMARY OF THE INVENTION --

Please amend the heading at page 5, line 14, as follows:

~~Disclosure of Invention~~ DETAILED DESCRIPTION

Please amend the paragraph starting at page 7, line 5, as follows:

In the production well treating fluid of the present invention, said viscosifier is preferably at least one selected from the group consisting of inorgano-electropositive ~~glue~~ gel, black organo-electropositive glue, cationic guanidine glue, cationic polyacrylamide and polyquaternary amine salt.

Please amend the paragraph starting at page 7, line 13, as follows:

In the production well treating fluid of the present invention, said electrical stabilizing agent is preferably at least one selected from the group consisting of an inorganic salt of iron or aluminum, such as iron chloride, aluminum chloride, ferric sulfate, aluminum sulfate, ~~hydroxyaluminium~~ hydroxyaluminum and organic cationic etherifying agent.

Please amend the paragraph starting at page 7, line 29, as follows:

Without intending to be bounded by any theory, the inventor believed that the cationic polymer component in the electropositive production well treating fluid according to the present invention can neutralize the negative charges of clay mineral ~~in a~~ at relatively high speed and with a relatively strong electrostatic force because ~~said~~ the component bears a positive charge, and has strong neutralizing ability, a longer polymer chain and good bridging action. ~~And~~ Also, the cationic polymer component can reduce greatly the specific surface area and negative charge of clay by lying singly on the surface of clay in a form of mono-molecule layer, thereby making the water-sensitivity of clay lost essentially and thus serving the function of stabilizing clay, and stabilizing effectively the borehole wall to realize the object of protecting oil-gas reservoir. However, the inorgano-electropositive ~~glue~~ gel and organo-electropositive ~~glue~~ gel and the like having a smaller molecular weight can further enter the space of crystal layers of clay sheet to form permanent adsorption, exerting even better ability of inhibiting hydration, swelling, dispersion and migration of clay shale, and thus forming a stable complex with clay particles to make no destruction of colloid occurred in the treating fluid system. So the stabilization of the treating fluid itself can be ensured. Therefore, the electropositive production well treating fluid of the present invention solves better the contradiction between "treating fluid stability" and "borehole wall stability". The electropositive production well treating fluid has advantages in strong ability of inhibiting the dispersion of clay (the ability of inhibiting dispersion of clay up to 90% above); high drilling speed (increasing the drilling speed more than 10%); regular shape of bore hole (the enlarging rate of well diameter less than 15%); good resistance to salt; good effect of protecting oil-gas reservoir (recovery rate of permeability higher than 80%); small amount of

the drilling fluid disused; and thus favorable to environmental protection. So it is suitable to use in the construction of a strong water-sensitive and complicated oil-gas field. It has a widespread use in operations such as drilling, well completion, well fracture, ~~increase~~ increasing production and well- flooding and the like.

Please amend the paragraph starting at page 10, line 4, as follows:

Example 8. By adding 3% black organo-electropositive ~~glue~~ gel (produced by Shenli Oil Field Drilling-mud Company, China) to the formulation of Example 1 as electrical stabilizing agent and using the same method as in Example 1, an electropositive drilling fluid without solid phase, perforating fluid, well-flushing fluid, breakdown fluid, spacing fluid or gravel-packing fluid was prepared.

Please amend the paragraph starting at page 10, line 24, as follows:

Example 14. An electropositive drilling fluid containing solid phase was prepared by using the same method as in Example 1 with the components as follows:

0.1% cationic etherifying agent,

0.1% cationic polyacrylamide,

0.5% inorgano-electropositive ~~glue~~ gel,

1% polymeric alcohol,

2% cationic starch,

2% electropositive mud-building agent for production well treating fluid, and

~~The~~ the balance was water.

Please amend the paragraph starting at page 11, line 3, as follows:

Example 15. An electropositive drilling fluid containing solid phase was prepared by using the same method as in Example 1 with the components as follows:

0.5% polyquaternary ammonium salt,

0.1% cationic polyacrylamide,

0.5% inorgano-electropositive ~~glue~~ gel,

2% polymeric alcohol,

2% cationic starch,

2% electropositive mud-building agent for production well treating fluid,

0.5% hydroxyethyl cellulose,

3% superfine calcium carbonate, and

~~The~~ the balance was water.

Please amend the paragraph starting at page 11, line 14, as follows:

Example 16. An electropositive drilling fluid containing solid phase, perforating fluid, well-flushing fluid, breakdown fluid, spacing fluid, acidification fluid or gravel-packing fluid was prepared by using components as follows and the same method as in Example 1:

0.1% polyquaternary ammonium salt,

3% black organo-electropositive ~~glue~~ gel,

2% polymeric alcohol,

2% cationic starch,

0.5% hydroxyethyl cellulose,

3% superfine calcium carbonate,

1% oil-soluble resin, and

~~The~~ the balance was water.

Please amend the paragraph starting at page 12, line 2, as follows:

Comparative Example 2. A conventional perforating fluid, well-flushing fluid, breakdown fluid, spacing fluid, acidification fluid or gravel-packing fluid was prepared by using components as follows and the same method as in Example 1:

0.5% partially hydrolyzed polyacrylamide,

2% modified starch,

2% inorganic-electropositive ~~glue~~ gel,

3% superfine calcium carbonate,

2% hydrolyzed polyacrylonitrile ammonium salt, and

~~The~~ the balance was water.